PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:	OLAV SOLGAARD; JONATHAN P. HERITAGE; AMAL R. BHATTARAI
Serial No.:	09/849,096
Filed:	MAY 4, 2001
For:	MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH
Group No.:	2874
Examiner:	LEE, J.
Docket No.:	UC97-156-8

Commissioner for Patents
Washington, D.C. 20231

PETITION FOR WITHDRAWAL OF ABANDONMENT

1. Applicant respectfully petitions that the abandonment set forth in the Notice of Abandonment mailed by the Office on October 25, 2002 be withdrawn.

2. The Notice of Abandonment indicated that abandonment was for failure to response to the Office Action mailed on March 11, 2002.

3. On May 13, 2002, Applicant mailed a response using Express Mail under 37 CFR 1.10.

4. Applicant's response was deemed received by the mail room on May 13, 2002 as evidenced by a return postcard bearing that date.

5. Submitted herewith is:

   (a) A copy of the Notice of Abandonment;

   (b) A copy of the return postcard showing receipt of the Applicant's response on May 13, 2002;

   (c) A copy of the Express Mail Label No. EL737163916US showing a date-in of May 13, 2002.

   (d) A copy of the response with the attached Certificate of Mailing by Express Mail under 37 CFR 1.10, Express Mail Label No. EL737163916US.

6. Inspection of the Applicant's response reveals that the caption contained an error in the serial number of the application. However, the caption carries other identifying information, including the docket number which should have facilitated matching these papers to the correct file. ***In addition, the correct serial number can be found at the bottom of pages 1 and 2 of the response.***

7. The incorrect serial number is a companion continuation application assigned to the same Examiner. Applicant's response is likely to be found in that file.

8. Bas d on th foregoing, th Applicant resp ctfully submits that a resp nse to th Offic Action of March 11, 2002 was tim ly fil d and requ sts that the aband nm nt b withdrawn. NO FEE SHOULD BE DUE; however, if a fe is du pl as charge D posit Account N . 07-1137. Applicant is a larg ntity.

9. In the event that the foregoing statement is insufficient for withdrawal of the abandonment, the Applicant alternatively petitions for revival of this application under 37 CFR 1.137(b) and certifies that the entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. If any fee is due, please charge Deposit Account No. 07-1137. Applicant is a large entity.

10. Please proceed with further examination of the basis of the attached copy of the papers originally filed. Acknowledgement of the active status of the application is respectfully requested.

Date: 11/5/02

Respectfully submitted,

John P. O'Banion, Reg. No. 33,201
O'BANION & RITCHEY LLP
400 Capitol Mall, Suite 1550
Sacramento, CA 95814
(916) 498-1010

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-157-8
Serial No. 09/849,096	Filing Date May 4, 2001	Examiner LEE, JOHN D.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

I hereby certify that the following correspondence:

Petition for Withdrawal of Abandonment (Page 1 & 2)

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

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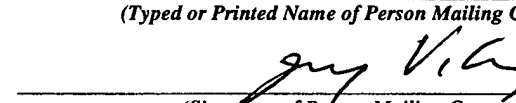
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,096	05/04/2001	Olav Solgaard	UC97-156-8	1934

7590 10/25/2002

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Suite 1550
400 Capitol Mall
Sacramento, CA 95814

EXAMINER
LEE, JOHN D

ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 10/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of Abandonment	Applicati n No. 09/849,096	Applicant(s) SOLGAARD ET AL.	
	Examin r John D. Lee	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on *March 11, 2002*.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
   (d) ☒ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

John D. Lee
Primary Examiner
Art Unit: 2874

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-157-8
Serial No. 09/849,096	Filing Date May 4, 2001	Examiner LEE, JOHN D.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

I hereby certify that the following correspondence:

Copy of Notice of Abandonment (Page 1 & 2)

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is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

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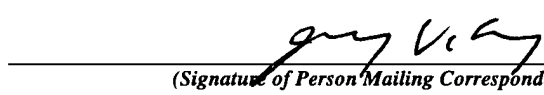
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The United States Patent and Trademark Office mail room stamp hereon acknowledges receipt of the following items:

For: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH
In the names of OLAV SOLGAARD; JONATHAN P. HERITAGE; AMAL R. BHATTARAI
Serial No. 09/849,096

1. Response (Page 1 & 2); Claims as allowed in Serial No. 09/766,529 (Page 1 thru 5);
Claims pending in Serial No. 09/813,446 (Page 1 thru 19) and;
Claims pending in Serial No. 09/928,237 (Page 1 thru 25).

Express Mail No.: EL737163916US
Date Mailed: May 13, 2002
Attorney: John P. O'Banion
Docket No.: UC97-156-8

THE UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-157-8
Serial No. 09/849,096	Filing Date May 4, 2001	Examiner LEE, JOHN D.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

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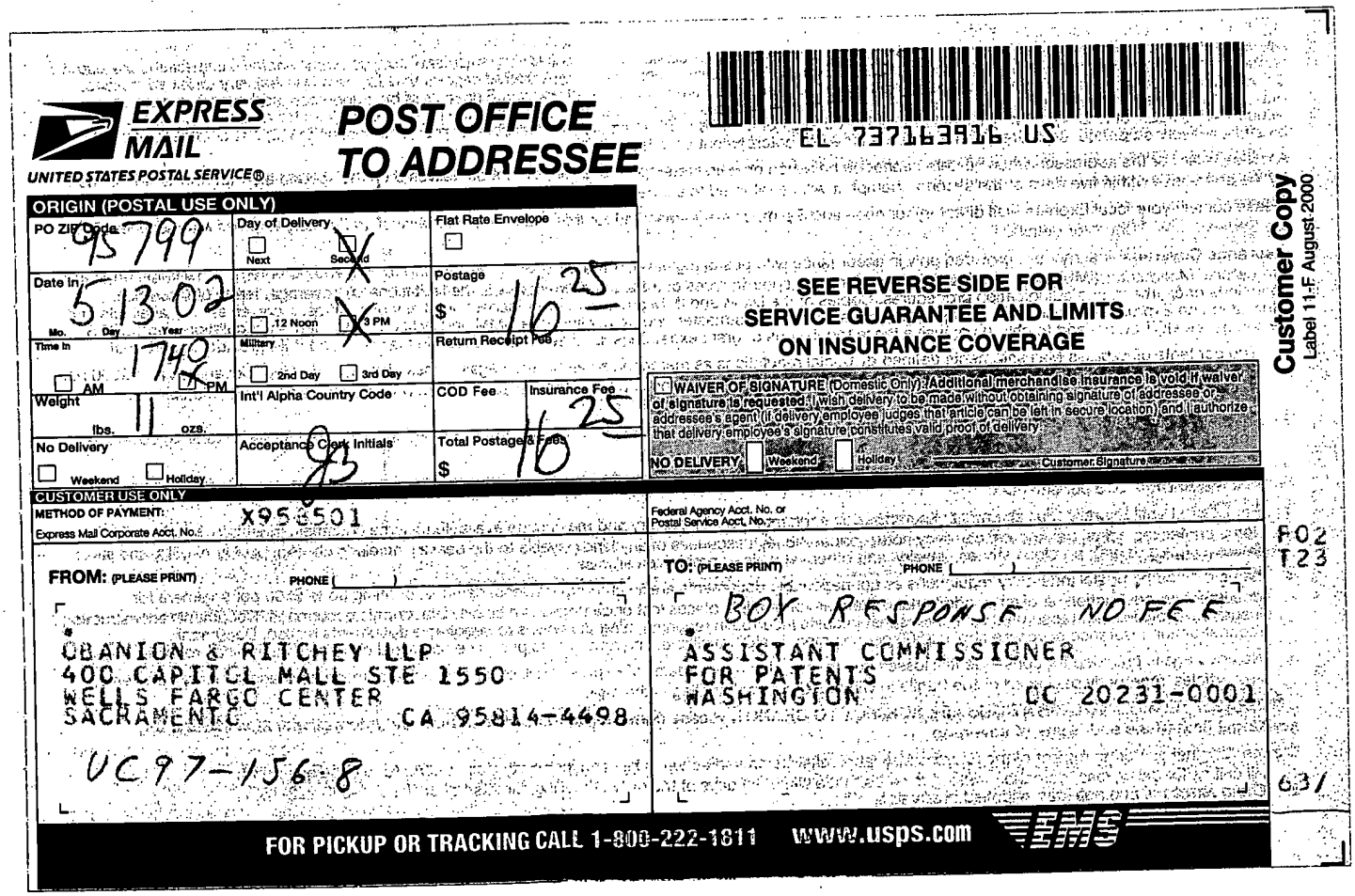

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CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-157-8
Serial No. 09/849,096	Filing Date May 4, 2001	Examiner LEE, JOHN D.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

I hereby certify that the following correspondence:

Copy of Express Mail Label No. EL737163916US from May 13, 2002 showing date in for Response (Page 1)

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RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
GROUP 2874

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: OLAV SOLGAARD; JONATHAN P. HERITAGE; AMAL R. BHATTARAI
Serial No.: 09/813,446
Filed: MAY 4, 2001
For: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH
Group No.: 2874
Examiner: LEE, J.
Docket No.: UC97-156-8

Assistant Commissioner for Patents
Washington, D.C. 20231

RESPONSE

Dear Sir:

This communication is responsive to the Office Action mailed March 11, 2002, which set a two-month period for response.

1. Allowance of Claims 31-64.

The Applicant notes with appreciation the allowance of Claims 31-64 and the Examiner's diligence to advance prosecution of this application.

2. Related Cases.

To assist the Examiner with advancing this application to issue, as well as related copending applications, and in response to the Examiner's request, the Applicant is providing herewith copies of all claims presently pending in each of the related copending applications. Claims for the following applications are enclosed herewith:

(a) S/N 09/766,529 (filed 01/19/01)

(b) S/N 09/813,446 (filed 03/20/01)

(c) S/N 09/928,237 (filed 08/10/01)

In addition, the Applicant calls to the attention of the Examiner, the following related issued U.S. patents:

(a) U.S. No. 6,097,859 (issued 08/01/00)

(b) U.S. No. 6,289,145 (issued 09/11/01)

(c) U.S. No. 6,327,398 (issued 12/04/01)

(d) U.S. No. 6,374,008 (issued 04/16/02)

3. Conclusion.

The Examiner is invited to contact the Applicant's attorney in the event of any question regarding this response.

Date: 5/13/02

Respectfully submitted,

John P. O'Banion, Reg. No. 33,201
O'BANION & RITCHEY LLP
400 Capitol Mall, Suite 1550
Sacramento, CA 95814
(916) 498-1010

CLAIMS AS ALLOWED IN SERIAL NO. 09/766,529

FOR WHICH ISSUE FEE HAS BEEN PAID

31. (amended) A micromirror optical switch, comprising:

a plurality of micromirrors;

at least one of said mirrors suspended from a support structure by a plurality of flexible couplings configured for allowing said at least one of said mirrors to tilt;

said optical switch configured for separating at least one wavelength component in an optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for independently switching said at least one wavelength component from at least one input port to at least one output port.

32. (amended) An optical switch as recited in claim 31, wherein said at least one of said mirrors is micromachined from silicon.

33. (amended) An optical switch as recited in claim 31, wherein tilt of said at least one of said mirrors is controlled by application of a controlled electrostatic field to said at least one of said mirrors.

34. (amended) An optical switch as recited in claim 31, wherein tilt of said at least one of said mirrors is electrically actuated.

35. (amended) A micromirror optical switch, comprising:

a plurality of micromirrors;

at least one of said mirrors having first and second flexible couplings;

first and second support structures;

a first flexible coupling extending between said first support structure and said at least one of said mirrors; and

a second flexible coupling extending between said second support structure and said at least one of said mirrors;

said optical switch configured for separating at least one wavelength component in an optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for independently switching said at least one wavelength component from at least one input port to at least one output port.

36. (amended) An optical switch as recited in claim 35, wherein said at least one of said mirrors is micromachined from silicon.

37. (amended) An optical switch as recited in claim 35, wherein said at least one of said mirrors is tiltable in relation to said support structures.

38. (amended) An optical switch as recited in claim 37, wherein tilt of said at least one of said mirrors is controlled by application of a controlled electrostatic field to said at least one of said mirrors.

39. (amended) An optical switch as recited in claim 37, wherein tilt of said at least one of said mirrors is electrically actuated.

40. (amended) An optical switching array, comprising:

a plurality of micromirrors suspended from a support structure by a plurality of corresponding flexible couplings configured for allowing said mirrors to tilt;

said optical switching array configured for separating at least one wavelength component in an optical beam from at least one other wavelength component of said optical beam;

said optical switching array configured for independently switching said at least one wavelength component from at least one input port to at least one output port.

41. An optical switching array as recited in claim 40, wherein said mirrors are micromachined from silicon.

42. An optical switching array as recited in claim 40, wherein tilt of each said mirrors is controlled by application of a controlled electrostatic field to said mirror.

43. An optical switching array as recited in claim 40, wherein mirror tilt is electrically actuated.

44. (amended) An optical switching array, comprising:

a plurality of micromirrors;

each said micromirror having a first support structure and a second support structure;

each said micromirror suspended by a flexible coupling extending between said mirror and said first support structure and suspended by a flexible coupling extending between said second support structure and said mirror;

said optical switching array configured for separating at least one wavelength component in an optical beam from at least one other wavelength component of said optical beam;

said optical switching configured for independently switching said at least one wavelength component from at least one input port to at least one output port.

45. An optical switching array as recited in claim 44, wherein each said mirror is micromachined from silicon.

46. An optical switching array as recited in claim 44, wherein each said mirror is tiltable in relation to said support structure suspending said mirror.

47. An optical switching array as recited in claim 46, wherein tilt of each said mirror is controlled by application of a controlled electrostatic field to said mirror.

48. An optical switching array as recited in claim 46, wherein mirror tilt is electrically actuated.

CLAIMS PENDING IN SERIAL NO. 09/813,446

31. (amended) An optical switch, comprising:

an array of actuated mirrors configured for switching an optical beam from an input port to an output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from an input port to an output port.

32. (amended) An optical switch, comprising:

an array of actuated mirrors configured for switching an optical beam from at least one input port to at least one output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from at least one input port to at least one output port.

33. (amended) An optical switch, comprising:

an array of actuated mirrors configured for switching an optical beam from any input port to any output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from any input port to any output port.

34. (amended) An optical switch, comprising:

at least one array of actuated mirrors configured for switching an optical beam from an input port to an output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from an input port to an output port.

35. (amended) An optical switch, comprising:

at least one array of actuated mirrors configured for switching an optical beam from at least one input port to at least one output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from at least one input port to at least one output port.

36. (amended) An optical switch, comprising:

at least one array of actuated mirrors configured for switching an optical beam from any input port to any output port;

said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

said optical switch configured for switching said at least one wavelength component from any input port to any output port.

37. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36, further comprising means for positioning said optical beam onto at least one array of actuated mirrors.

38. An optical switch as recited in claim 37, wherein said means for positioning comprises at least one lens.

39. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36, further comprising at least one imaging component configured for positioning said optical beam onto at least one array of actuated mirrors.

40. An optical switch as recited in claim 39, wherein said imaging component comprises at least one lens.

41. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36, wherein said optical switch is configured for a specific mirror in at least one array of actuated mirrors to receive an optical beam from a corresponding one specific input port.

42. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36, wherein said optical switch is configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one array of actuated mirrors.

43. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36,

wherein said optical switch is configured for a specific mirror in at least one array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in said at least one array of actuated mirrors.

44. An optical switch as recited in claim 31, 32, 33, 34, 35, or 36, wherein at least one array of actuated mirrors comprises a two-dimensional array.

45. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an array of actuated mirrors configured for switching an optical beam from

an input port to an output port;

(d) said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from an input port to an output port.

46. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port; and

(c) an array of actuated mirrors configured for switching an optical beam from at least one said input port to at least one said output port;

(d) said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from at least one said input port to at least one said output port.

47. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port; and

(c) an array of actuated mirrors configured for switching an optical beam from any said input port to any said output port;

(d) said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from any said input port to any said output port.

48. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port; and

(c) at least one array of actuated mirrors configured for switching an optical beam from an input port to an output port;

(d) said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from an input port to an output port.

49. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port; and

(c) at least one array of actuated mirrors configured for switching an optical beam from at least one said input port to at least one said output port;

(d) said optical switch configured for separating at least one wavelength

component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from at least one said input port to at least one said output port.

50. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port; and

(c) at least one array of actuated mirrors configured for switching an optical beam from any said input port to any said output port;

(d) said optical switch configured for separating at least one wavelength component in said optical beam from at least one other wavelength component of said optical beam;

(e) said optical switch configured for switching said at least one wavelength component from any said input port to any said output port.

51. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50, further comprising means for positioning said optical beam onto at least one array of actuated mirrors.

52. An optical switch as recited in claim 51, wherein said means for positioning comprises at least one lens.

53. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50, further comprising at least one imaging component configured for positioning said optical beam onto at least one array of actuated mirrors.

54. An optical switch as recited in claim 53, wherein said imaging component comprises at least one lens.

55. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50, wherein said optical switch is configured for a specific mirror in at least one array of actuated mirrors to receive an optical beam from a corresponding one specific input port.

56. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50, wherein said optical switch is configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one array of actuated mirrors.

57. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50,

wherein said optical switch is configured for a specific mirror in at least one array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in said at least one array of actuated mirrors.

58. An optical switch as recited in claim 45, 46, 47, 48, 49, or 50, wherein at least one array of actuated mirrors comprises a two-dimensional array.

59. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an input array of actuated mirrors; and

(d) an output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from an input port to an output port.

60. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an input array of actuated mirrors; and

(d) an output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from at least one said input port to at least one said output port.

61. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an input array of actuated mirrors; and

(d) an output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from any said input port to any said output port.

62. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) at least one input array of actuated mirrors; and

(d) at least one output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from an input port to an output port.

63. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) at least one input array of actuated mirrors; and

(d) at least one output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from at least one said input port to at least one said output port.

64. An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) at least one input array of actuated mirrors; and

(d) at least one output array of actuated mirrors;

(e) said input and output arrays of actuated mirrors configured for switching an optical beam from any said input port to any said output port.

65. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, further comprising means for positioning said optical beam onto at least one input array of actuated mirrors.

66. An optical switch as recited in claim 65, wherein said means for positioning comprises at least one lens.

67. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, further comprising at least one imaging component configured for positioning said optical beam onto at least one input array of actuated mirrors.

68. An optical switch as recited in claim 67, wherein at least one imaging component comprises at least one lens.

69. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein said optical switch is configured for a specific mirror in at least one input array of actuated mirrors to receive an optical beam from a corresponding one specific input port.

70. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein said optical switch is configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one output array of actuated mirrors.

71. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64,

wherein said optical switch is configured for a specific mirror in at least one input array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one output array of actuated mirrors.

72. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein each mirror in at least one input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in at least one output array of actuated mirrors.

73. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein each output mirror in at least one output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in at least one input array of actuated mirrors.

74. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64,

wherein each mirror in at least one input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in at least one output array of actuated mirrors; and

wherein each output mirror in at least one output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in at least one input array of actuated mirrors.

75. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein at least one array of actuated mirrors comprises a two-dimensional array.

76. An optical switch as recited in claim 59, 60, 61, 62, 63, or 64, wherein at least one output array of actuated mirrors is spatially separated from at least one input array of actuated mirrors.

77. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an input array of actuated mirrors;

(d) an output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto said input array of actuated mirrors;

(f) wherein said optical switch is configured for a specific mirror in said input

array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

(g) wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in said output array of actuated mirrors.

78. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) a least one input array of actuated mirrors;

(d) at least one output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto at least one input array of actuated mirrors;

(f) wherein said optical switch is configured for a specific mirror in an input array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

(g) wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in an output array of actuated mirrors.

79. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) a least one input array of actuated mirrors;

(d) at least one output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto at least one input array of actuated mirrors;

(f) wherein said optical switch is configured for a specific mirror in at least one input array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

(g) wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one output array of actuated mirrors.

80. An optical switch as recited in claim 77, 78, or 79, wherein at least one imaging component comprises at least one lens.

81. An optical switch as recited in claim 77, 78, or 79, wherein each mirror in at least one input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in at least one output array of actuated mirrors.

82. An optical switch as recited in claim 77, 78, or 79, wherein each output mirror in at least one output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in at least one input array of actuated mirrors.

83. An optical switch as recited in claim 77, 78, or 79,

wherein each mirror in at least one input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in at least one output array of actuated mirrors; and

wherein each output mirror in at least one output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in at least one input array of actuated mirrors.

84. An optical switch as recited in claim 77, 78, or 79, wherein at least one array of actuated mirrors comprises a two-dimensional array.

85. An optical switch as recited in claim 77, 78, or 79, wherein at least one output array of actuated mirrors is spatially separated from at least one input array of actuated mirrors.

86. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) an input array of actuated mirrors;

(d) an output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto said input array of actuated mirrors;

(f) wherein each mirror in said input array of actuated mirrors is configured to

steer an incident optical beam to any, but not more than one for a given setting, mirror in said output array of actuated mirrors; and

(g) wherein each output mirror in said output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in said input array of actuated mirrors.

87. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) at least one input array of actuated mirrors;

(d) at least one output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto at least one input array of actuated mirrors;

(f) wherein each mirror in an input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in an output array of actuated mirrors; and

(g) wherein each output mirror in an output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in an input array of actuated mirrors.

88. (amended) An optical switch, comprising:

(a) at least one input port;

(b) at least one output port;

(c) at least one input array of actuated mirrors;

(d) at least one output array of actuated mirrors; and

(e) at least one imaging component configured for positioning an optical beam onto at least one input array of actuated mirrors;

(f) wherein each mirror in at least one input array of actuated mirrors is configured to steer an incident optical beam to any, but not more than one for a given setting, mirror in at least one output array of actuated mirrors; and

(g) wherein each output mirror in at least one output array of actuated mirrors can be set to receive an optical beam from any, but not more than one for a given setting, mirror in at least one input array of actuated mirrors.

89. An optical switch as recited in claim 86, 87, or 88, wherein at least one imaging component comprises at least one lens.

90. An optical switch as recited in claim 86, 87, or 88, wherein at least one array of actuated mirrors comprises a two-dimensional array.

91. An optical switch as recited in claim 86, 87, or 88, wherein at least one output array of actuated mirrors is spatially separated from at least one input array of actuated mirrors.

92. An optical switch as recited in claim 86, 87, or 88, wherein said optical switch is configured for a specific mirror in at least one input array of actuated mirrors to

receive an optical beam from a corresponding one specific input port.

93. An optical switch as recited in claim 86, 87, or 88, wherein said optical switch is configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one output array of actuated mirrors.

94. An optical switch as recited in claim 86, 87, or 88,

wherein said optical switch is configured for a specific mirror in at least one input array of actuated mirrors to receive an optical beam from a corresponding one specific input port; and

wherein said optical switch is further configured for a specific output port to receive an optical beam from a corresponding one specific mirror in at least one output array of actuated mirrors.

CLAIMS PENDING IN SERIAL NO. 09/928,237

(claims 123-168 ar withdrawn in r sponse to restriction requirement)

31. A fiber optic spectrometer, comprising:

an input port;

a detector; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said input port onto said detector.

32. A spectrometer as recited in claim 31, wherein said optic beam comprises a wavelength component of an optic input signal.

33. A spectrometer as recited in claim 31, wherein said input port comprises an optic fiber.

34. A spectrometer as recited in claim 33, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

35. A spectrometer as recited in claim 34, wherein said optic beam comprises a wavelength component of said optic input signal.

36. A spectrometer as recited in claim 31, further comprising a lens associated with said wavelength dispersive element.

37. A spectrometer as recited in claim 36, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input port onto said detector.

38. A spectrometer as recited in claim 31, wherein said detector comprises an array of detector elements.

39. A spectrometer as recited in claim 31, wherein said detector comprises a single detector element.

40. A fiber optic spectrometer, comprising:

an input optic fiber;

a detector; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said input fiber onto said detector.

41. A spectrometer as recited in claim 40, wherein said optic beam comprises a wavelength component of an optic input signal.

42. A spectrometer as recited in claim 40, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

43. A spectrometer as recited in claim 42, wherein said optic beam comprises a wavelength component of said optic input signal.

44. A spectrometer as recited in claim 40, further comprising a lens associated with said wavelength dispersive element.

45. A spectrometer as recited in claim 44, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input port onto said detector.

46. A spectrometer as recited in claim 40, wherein said detector comprises an array of detector elements.

47. A spectrometer as recited in claim 40, wherein said detector comprises a single detector element.

48. A fiber optic spectrometer, comprising:

a fiber optic input path;

a detector; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said fiber optic input path onto said detector.

49. A spectrometer as recited in claim 48, wherein said optic beam comprises a wavelength component of an optic input signal.

50. A spectrometer as recited in claim 48, wherein said fiber optic input path comprises an optic fiber.

51. A spectrometer as recited in claim 50, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

52. A spectrometer as recited in claim 51, wherein said optic beam comprises a wavelength component of said optic input signal.

53. A spectrometer as recited in claim 48, further comprising a lens associated with said wavelength dispersive element.

54. A spectrometer as recited in claim 53, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input port onto said detector.

55. A spectrometer as recited in claim 48, wherein said detector comprises an array of detector elements.

56. A spectrometer as recited in claim 48, wherein said detector comprises a single detector element.

57. A fiber optic spectrometer, comprising:

an input port;

a detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said input port onto said detector.

58. A spectrometer as recited in claim 57, wherein said optic beam comprises a wavelength component of an optic input signal.

59. A spectrometer as recited in claim 57, wherein said input port comprises an optic fiber.

60. A spectrometer as recited in claim 59, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

61. A spectrometer as recited in claim 60, wherein said optic beam comprises a wavelength component of said optic input signal.

62. A spectrometer as recited in claim 57, wherein said detector comprises an array of detector elements.

63. A spectrometer as recited in claim 57, wherein said detector comprises a single detector element.

64. A fiber optic spectrometer, comprising:

an input optic fiber;

a detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said input fiber onto said detector.

65. A spectrometer as recited in claim 64, wherein said optic beam comprises a wavelength component of an optic input signal.

66. A spectrometer as recited in claim 64, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

67. A spectrometer as recited in claim 66, wherein said optic beam comprises a wavelength component of said optic input signal.

68. A spectrometer as recited in claim 64, wherein said detector comprises an array of detector elements.

69. A spectrometer as recited in claim 64, wherein said detector comprises a single detector element.

70. A fiber optic spectrometer, comprising:

a fiber optic input path;

a detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said fiber optic input path onto said detector.

71. A spectrometer as recited in claim 70, wherein said optic beam comprises a wavelength component of an optic input signal.

72. A spectrometer as recited in claim 70, wherein said fiber optic input path comprises an optic fiber.

73. A spectrometer as recited in claim 72, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

74. A spectrometer as recited in claim 73, wherein said optic beam comprises a wavelength component of said optic input signal.

75. A spectrometer as recited in claim 70, wherein said detector comprises an array of detector elements.

76. A spectrometer as recited in claim 70, wherein said detector comprises a single detector element.

77. A fiber optic spectrometer, comprising:

an input port;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said input port to said detector; and

a wavelength dispersive element;

said wavelength dispersive element configured to position said optic beam from said input port onto said array of actuated mirrors.

78. A spectrometer as recited in claim 77, wherein said optic beam comprises a wavelength component of an optic input signal.

79. A spectrometer as recited in claim 77, wherein said input port comprises an optic fiber.

80. A spectrometer as recited in claim 79, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

81. A spectrometer as recited in claim 80, wherein said optic beam comprises a wavelength component of said optic input signal.

82. A spectrometer as recited in claim 77, further comprising a lens associated with said wavelength dispersive element.

83. A spectrometer as recited in claim 82, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input port onto said array of actuated mirrors.

84. A spectrometer as recited in claim 77, wherein said detector comprises an array of detector elements.

85. A spectrometer as recited in claim 77, wherein said detector comprises a single detector element.

86. A fiber optic spectrometer, comprising:

an input optic fiber;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said input port to said detector;

a wavelength dispersive element;

said wavelength dispersive element configured to position said optic beam from said input optic fiber onto said array of actuated mirrors.

87. A spectrometer as recited in claim 86, wherein said optic beam comprises a wavelength component of an optic input signal.

88. A spectrometer as recited in claim 86, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

89. A spectrometer as recited in claim 88, wherein said optic beam comprises a wavelength component of said optic input signal.

90. A spectrometer as recited in claim 86, further comprising a lens associated with said wavelength dispersive element.

91. A spectrometer as recited in claim 90, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input optic fiber onto said array of actuated mirrors.

92. A spectrometer as recited in claim 86, wherein said detector comprises an array of detector elements.

93. A spectrometer as recited in claim 86, wherein said detector comprises a single detector element.

94. A fiber optic spectrometer, comprising:

a fiber optic input path;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said fiber optic input path to said detector;

a wavelength dispersive element;

said wavelength dispersive element configured to position said optic beam from said fiber optic input path onto said array of actuated mirrors.

95. A spectrometer as recited in claim 94, wherein said optic beam comprises a wavelength component of an optic input signal.

96. A spectrometer as recited in claim 94, wherein said fiber optic input path comprises an optic fiber.

97. A spectrometer as recited in claim 96, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

98. A spectrometer as recited in claim 97, wherein said optic beam comprises a wavelength component of said optic input signal.

99. A spectrometer as recited in claim 94, further comprising a lens associated with said wavelength dispersive element.

100. A spectrometer as recited in claim 99, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said fiber optic input path onto said array of actuated mirrors.

101. A spectrometer as recited in claim 94, wherein said detector comprises an array of detector elements.

102. A spectrometer as recited in claim 94, wherein said detector comprises a single detector element.

103. A fiber optic spectrometer, comprising:

an input port;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said input port to said detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position said optic beam from said input port onto said array of actuated mirrors.

104. A spectrometer as recited in claim 103, wherein said optic beam comprises a wavelength component of an optic input signal.

105. A spectrometer as recited in claim 103, wherein said input port comprises an optic fiber.

106. A spectrometer as recited in claim 105, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

107. A spectrometer as recited in claim 106, wherein said optic beam comprises a wavelength component of said optic input signal.

108. A spectrometer as recited in claim 103, wherein said detector comprises an array of detector elements.

109. A spectrometer as recited in claim 103, wherein said detector comprises a single detector element.

110. A fiber optic spectrometer, comprising:

an input optic fiber;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said input port to said detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and lens configured to position said optic beam from said input optic fiber onto said array of actuated mirrors.

111. A spectrometer as recited in claim 110, wherein said optic beam comprises a wavelength component of an optic input signal.

112. A spectrometer as recited in claim 110, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

113. A spectrometer as recited in claim 112, wherein said optic beam comprises a wavelength component of said optic input signal.

114. A spectrometer as recited in claim 110, wherein said detector comprises an array of detector elements.

115. A spectrometer as recited in claim 110, wherein said detector comprises a single detector element.

116. A fiber optic spectrometer, comprising:

a fiber optic input path;

a detector;

an array of actuated mirrors;

said array of actuated mirrors configured for switching an optic beam from said fiber optic input path to said detector;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position said optic beam from said fiber optic input path onto said array of actuated mirrors.

117. A spectrometer as recited in claim 116, wherein said optic beam comprises a wavelength component of an optic input signal.

118. A spectrometer as recited in claim 116, wherein said fiber optic input path comprises an optic fiber.

119. A spectrometer as recited in claim 118, wherein said optic fiber carries a plurality of wavelength components of an optic input signal.

120. A spectrometer as recited in claim 119, wherein said optic beam comprises a wavelength component of said optic input signal.

121. A spectrometer as recited in claim 116, wherein said detector comprises an array of detector elements.

122. A spectrometer as recited in claim 116, wherein said detector comprises a single detector element.

123. A fiber optic switch, comprising:

an input port;

an output port;

a detector;

an array of actuated mirrors; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said input port onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said input port to said output port or to said detector.

124. A switch as recited in claim 123, wherein said optic beam comprises a wavelength component of an optic input signal.

125. A switch as recited in claim 123, wherein said input and output ports comprise optic fibers.

126. A switch as recited in claim 125, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

127. A switch as recited in claim 126, wherein said optic beam comprises a wavelength component of said optic input signal.

128. A switch as recited in claim 123, further comprising a lens associated with said wavelength dispersive element.

129. A switch as recited in claim 128, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input port onto said array of actuated mirrors.

130. A switch as recited in claim 123, wherein said detector comprises an array of detector elements.

131. A switch as recited in claim 123, wherein said detector comprises a single detector element.

132. A fiber optic switch, comprising:

an input optic fiber;

an output optic fiber;

a detector;

an array of actuated mirrors; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said input port onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said input port to said output optic fiber or to said detector.

133. A switch as recited in claim 132, wherein said optic beam comprises a wavelength component of an optic input signal.

134. A switch as recited in claim 132, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

135. A switch as recited in claim 134, wherein said optic beam comprises a wavelength component of said optic input signal.

136. A switch as recited in claim 132, further comprising a lens associated with said wavelength dispersive element.

137. A switch as recited in claim 136, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said input optic fiber onto said array of actuated mirrors.

138. A switch as recited in claim 132, wherein said detector comprises an array of detector elements.

139. A switch as recited in claim 132, wherein said detector comprises a single detector element.

140. A fiber optic switch, comprising:

a fiber optic input path;

a fiber optic output path;

a detector;

an array of actuated mirrors; and

a wavelength dispersive element;

said wavelength dispersive element configured to position an optic beam from said fiber optic input path onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said fiber optic input path to said fiber optic output path or to said detector.

141. A switch as recited in claim 140, wherein said optic beam comprises a wavelength component of an optic input signal.

142. A switch as recited in claim 140, wherein said fiber optic input and output paths comprise optic fibers.

143. A switch as recited in claim 142, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

144. A switch as recited in claim 143, wherein said optic beam comprises a wavelength component of said optic input signal.

145. A switch as recited in claim 140, further comprising a lens associated with said wavelength dispersive element.

146. A switch as recited in claim 145, wherein said wavelength dispersive element and said lens are configured to position said optic beam from said fiber optic input path onto said array of actuated mirrors.

147. A switch as recited in claim 140, wherein said detector comprises an array of detector elements.

148. A switch as recited in claim 140, wherein said detector comprises a single detector element.

149. A fiber optic switch, comprising:

an input port;

an output port;

a detector;

an array of actuated mirrors;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said input port onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said input port to said output port or to said detector.

150. A switch as recited in claim 149, wherein said optic beam comprises a wavelength component of an optic input signal.

151. A switch as recited in claim 149, wherein said input and output ports comprise optic fibers.

152. A switch as recited in claim 151, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

153. A switch as recited in claim 152, wherein said optic beam comprises wavelength component of said optic input signal.

154. A switch as recited in claim 149, wherein said detector comprises an array of detector elements.

155. A switch as recited in claim 149, wherein said detector comprises a single detector element.

156. A fiber optic switch, comprising:

an input optic fiber;

an output optic fiber;

a detector;

an array of actuated mirrors;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said input optic fiber onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said input optic fiber to said output optic fiber or to said detector.

157. A switch as recited in claim 156, wherein said optic beam comprises a wavelength component of an optic input signal.

158. A switch as recited in claim 156, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

159. A switch as recited in claim 158, wherein said optic beam comprises a wavelength component of said optic input signal.

160. A switch as recited in claim 156, wherein said detector comprises an array of detector elements.

161. A switch as recited in claim 156, wherein said detector comprises a single detector element.

162. A fiber optic switch, comprising:

a fiber optic input path;

a fiber optic output path;

a detector;

an array of actuated mirrors;

a wavelength dispersive element; and

a lens associated with said wavelength dispersive element;

said wavelength dispersive element and said lens configured to position an optic beam from said fiber optic input path onto said array of actuated mirrors;

said array of actuated mirrors configured for performing wavelength switching of said optic beam from said fiber optic input path to said fiber optic output path or to said detector.

163. A switch as recited in claim 162, wherein said optic beam comprises a wavelength component of an optic input signal.

164. A switch as recited in claim 163, wherein said fiber optic input and output paths comprise optic fibers.

165. A switch as recited in claim 164, wherein said input optic fiber carries a plurality of wavelength components of an optic input signal.

166. A switch as recited in claim 165, wherein said optic beam comprises a wavelength component of said optic input signal.

167. A switch as recited in claim 162, wherein said detector comprises an array of detector elements.

168. A switch as recited in claim 162, wherein said detector comprises a single detector element.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-156-8
Serial No. 09/813,446	Filing Date MAY 4, 2001	Examiner LEE, J.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

I hereby certify that the following correspondence:

Response (Page 1 & 2); Claims as allowed in Serial No. 09/766,529 (Page 1 thru 5); Claims pending in Serial No. 09/813,446 (Page 1 thru 19); Claims pending in Serial No. 09/928,237 (Page 1 thru 25)

(Identify type of correspondence)

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CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): OLAV SOLGAARD ET AL.			Docket No. UC97-157-8
Serial No. 09/849,096	Filing Date May 4, 2001	Examiner LEE, JOHN D.	Group Art Unit 2874

Invention: MULTI-WAVELENGTH CROSS-CONNECT OPTICAL SWITCH

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Copy of Response mailed on May 13, 2002 with copy of Certificate of Mailing (Page 1 thru 52)

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